Weekly Summary Report
USEPA Oversight, Sauget Area 2, Sauget, IL
WA No. 224-RXBF-05XX / Contract No. 68-W6-0025

Week Ending Friday, October 29, 2004

This report summarizes the Interim Remedial Action (IRA) work conducted by Solutia and its contractors from October 25 through October 29, 2004 at Site R, Sauget Area 2. The current IRA fieldwork consists of backfill placement, trench cleaning, slurry stabilization, trench cap construction, and site grading/restoration.

Contractors Onsite

Inquip Associates Inc. (barrier wall construction contractor)
PSI (geotechnical testing subcontractor)
Aerotek (air monitoring subcontractor)
URS (primary consultant for Solutia)

Work Performed This Week

Work at Site R continued with 1,860 cubic yards of backfill placed into the open trench in the northern portion of the site on five days during the week. Barrier wall capping and site grading activities continued in the southern portion of Site R. Cement was added to cells containing slurry within the bermed area on top of the landfill, to continue the slurry stabilization.

By the end of the week, the remaining open trench decreased to approximately 537 feet in length. Trench excavation is 100 percent complete, and backfill activities were approximately 97.5 percent complete at the end of the reporting period.

Groundwater Migration Control System (GMCS)

The river elevation increased gradually during the week from 381.73 feet above mean sea level (amsl) on October 22 to 384.63 feet amsl on October 29. Correspondingly, the GMCS combined system flow rate decreased during the week from approximately 1,560 gpm on October 22, to 1,140 gpm on October 29.

URS continued work during the week evaluating the eight barrier wall piezometers and their dedicated transducers at the site during the week. The transducers were reset during the week, and at the end of the reporting period the transducers had each been consistently recording water levels for several days. Groundwater samples from selected piezometers were collected for specific gravity testing.

From October 27 onward during the reporting period, the four pairs of piezometers showed an equivalent to inward gradient across the barrier wall. Water elevations at piezometers located inside the wall varied between approximately 0 to 3 feet lower than the water level at the corresponding piezometer located outside of the barrier wall. The river level during the week remained higher or equivalent to water levels in piezometers located on the inside of the barrier

wall. The river level was generally between 0 and 3 feet higher than the water levels in the inside piezometers.

Table 1 shows the river and piezometer water elevations measured on October 29, 2004 (11:00 AM). The barrier wall has been constructed adjacent to all piezometer pairs.

TABLE 1
River and Piezometer Water Elevations – October 29, 2004 (11:00)

	Elevation (ft above mean sea level)
River Level	384.63
Piezometer 1S – inside wall (northern-most pair)	382.40
Piezometer 1N – outside wall (northern-most pair)	385.59
Piezometer 2E – inside wall (north-central pair)	384.25
Piezometer 2W – outside wall (north-central pair)	384.02
Piezometer 3E – inside wall (south-central pair)	383.29
Piezometer 3W – outside wall (south-central pair)	383.96
Piezometer 4E – inside wall (southern-most pair)	384.28
Piezometer 4W – outside wall (southern-most pair)	385.32

Barrier Wall Construction

Inquip has completed excavation of the barrier wall to total depth, and during the week the backfill continued to stack along the northern leg of the barrier wall towards the northeast terminus at station 37+93. During the week the open trench decreased by approximately 140 linear feet as backfill 'daylighted' to ground surface at station 32+060. The remaining open trench extends from station 32+60 to station 37+ 93, approximately 537 feet in length.

The Liebherr 853 hydraulic clamshell was utilized during the week for trench cleaning prior to backfill placement. The Liebherr 855 mechanical clamshell and Koehring 1266 trackhoe remain onsite awaiting demobilization.

During the week, the depth of the open trench was measured daily. Table 2 summarizes the trench profile that was measured on the morning of October 29. On Graph 1, the current trench profile is depicted in comparison with the trench profile measured on October 22. Graph 2 shows the overall progress of the barrier wall construction.

Barrier Wall Cap Construction and Site Grading

Inquip continued the barrier wall cap construction and site grading during the week on days when stormwater collected on site did not impede construction activities. The barrier wall cap is constructed by placing a 5-mil polyethylene plastic sheeting and Tensar UX1400HS geogrid over the top of the wall, 3 feet below grade. Subsequently, 3 feet of work pad material is placed over the top of the barrier wall, with a bulldozer compacting each lift. A metallic tape marker was placed between the two lifts of work pad material to mark the alignment of the barrier wall.

Slurry

No fresh slurry was mixed or utilized during the week. Trench slurry samples were collected from the top and the bottom of the trench and were tested for viscosity, density (unit weight), filtrate loss, pH and sand content. Analysis of trench slurry samples either met the specifications or satisfied the quality targets. The sand content in slurry samples remained at approximately 20 percent throughout the week. The unit weight of trench slurry averaged 83 pounds per cubic foot (pcf), approximately 39 pcf lighter than the backfill placed. Trench slurry was recirculated during the week near the northeast trench terminus through the desander unit in order to improve the slurry sand content. Excess trench slurry was pumped from the open trench at station 37+93 to the north containment berm on top of the landfill.

Slurry stabilization continued during the week with approximately 8 percent cement added to the trench slurry within 50 by 50 feet cells constructed within the southern containment berm on top of the landfill. Trench slurry was pumped into the cells, the Portland cement mixture was added and stirred into the slurry by a trackhoe. Inquip will continue to monitor the stabilization cells as the slurry hardens.

Spoils Handling

During the week, spoils were transferred from the temporary stockpile on top of the landfill to the backfill mix pad near station 32+20.

Backfill and Trench Cleaning

During the week, Inquip mixed and placed approximately 1,860 cubic yards of backfill material into the open trench. Backfill operations took place on five days during the reporting period. Backfill spoils were mixed with approximately two percent of dry bentonite and slurry as necessary to meet quality specifications.

Backfill was tested for unit weight, slump and moisture content. The unit weight for backfill placed this week ranged from 119.5 to 124 pcf. Slump results varied between 4 and 5 inches, and the moisture content result ranged between 23 and 28 percent. Tests on the backfill mixture to be conducted offsite by Mueser-Rutledge and Golder laboratories included permeability and gradation. Test results reviewed during the week met the quality specifications.

Stormwater

Rain during the week caused pooling of stormwater on site. Stormwater was pumped during the week to the north modutank.

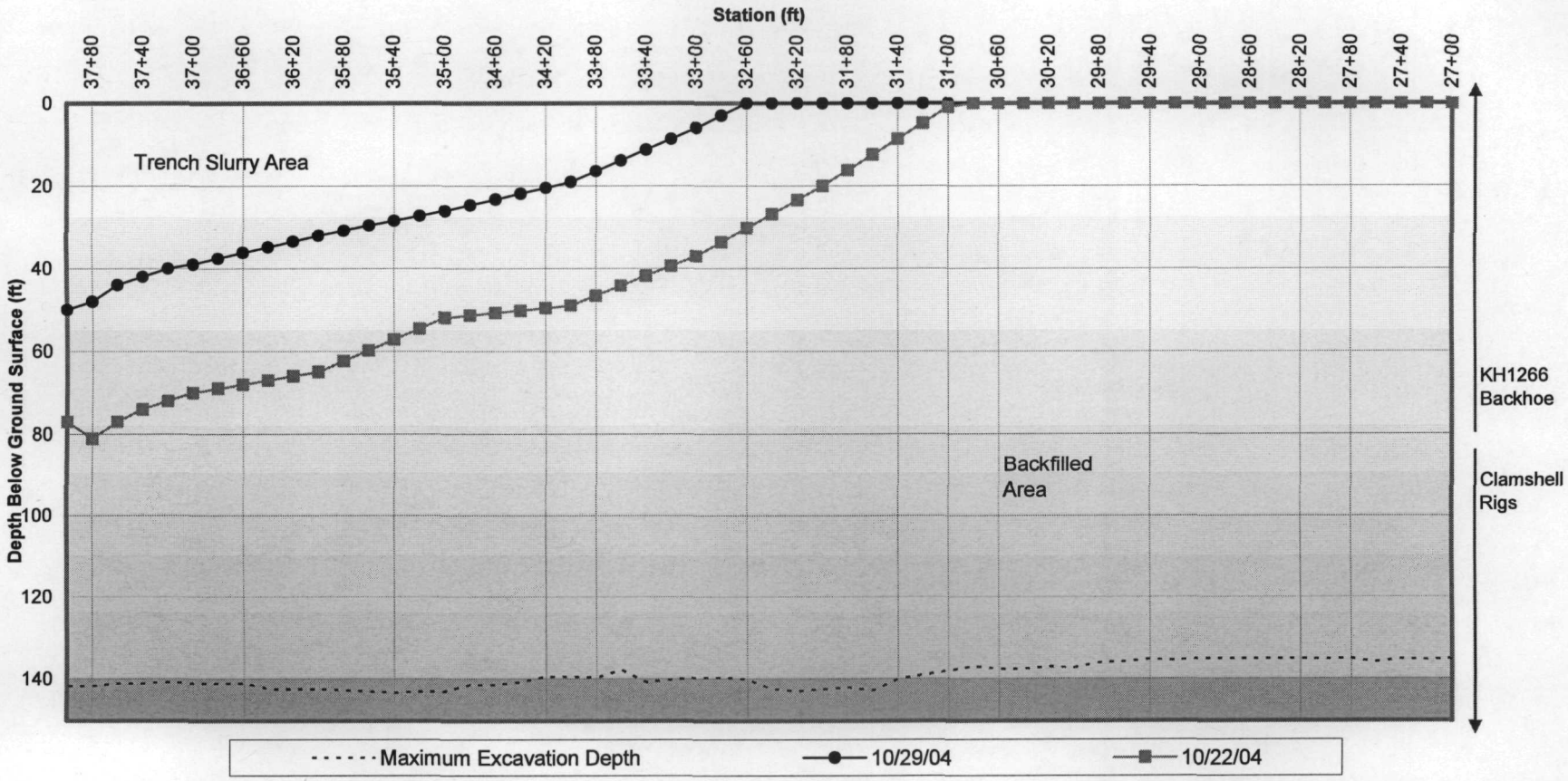
Other Activities

Aerotek performed the routine air monitoring conducted at Site R on five days during the reporting period.

TABLE 2
Trench Profile (Downrigger Measurements) for the Barrier Wall Trench –October 29, 2004 (AM)

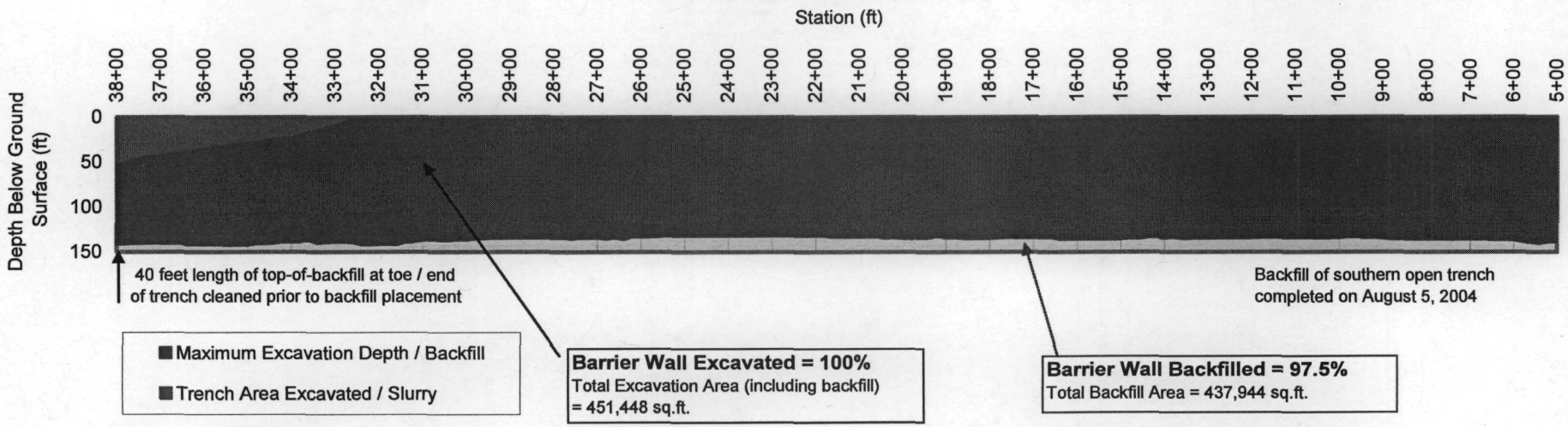
Station ID	Depth to bottom (ft below ground surface)
32+60	0
33+00	6
34+00	19
35+00	26
36+00	32
37+00	39
37+20	40
37+40	42
37+60	44
37+80	48
37+93	50

Graph 1 - Weekly Barrier Wall Construction Progress - Open Trench Segment
October 25 through October 29, 2004



Note: Data plotted for the week through measurements on 10/25/04 and 10/29/04.
Some data points are interpolated between the available data points where trench depths were read.

Graph 2 - Barrier Wall Construction Progress by October 29, 2004 (AM)



Note: Data plotted for the week through AM measurements on 10/29/04